U.S. Weather bureau.

MONTHLY WEATHER REVIEW,

DECEMBER, 1872.

WAR DEPARTMENT.

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

STORMS.

During this month no less than twenty-seven storm-centres have been traced in their progress over various parts of the country upon the War Department Weather Maps, Signal Service, United States Army. Two of these storms have apparently travelled entirely across the country from the Pacific coast, but the paths of the remainder are mostly confined to the country east of the Rocky Mountains, and are about equally divided between the two favorite winter routes of these disturbances, the one from the northwest eastward over the Lake region and northern New England to the eastern British provinces, and the other from the southwest northeastward to the Middle States and New England, or eastward along the Gulf coast, thence following the trend of the Atlantic coast northeastward toward Nova Scotia. The usual attending high winds and gales of the winter storms have been experienced in nearly all parts of the country, but their approach has been announced by the display of forty-two cautionary signals at the Lake ports, thirty-two on the Atlantic coast, and three on the Gulf.

RAINFALL.

The returns from the Signal Service stations show that an excess of rain, amounting to from 2 to 5 inches above the mean rainfalls for December, has, during the month, fallen in Texas, Louisiana, and western Mississippi. A surplus, varying from 1.12 inches to 2.69 inches, has also fallen in southern Virginia, North Carolina, eastern Tennessee, interior portions of South Carolina, and Georgia, and in northeastern Florida. In all other sections east of the Rocky Mountains (excepting at New London, Rochester, Leavenworth, and Breckenridge, which exhibit amounts slightly above the mean) the figures show that the fall of rain and snow has been less than the average for December. This deficiency is comparatively small for New England, the Middle States, and lower lake region, but is large in western Tennessee, the Ohio and upper Mississippi valleys, and over the country adjacent to Lakes Michigan and Superior, the precipitation having been scarcely one-fourth as much as the average for the month at many stations in these sections.

TEMPERATURE.

The mean temperatures for the month at the Signal Service stations compared with the mean temperatures for December, as ascertained by a long series of observations, show that the month has been much colder than usual everywhere east of the Rocky Mountains. This excess of cold amounts to from 5° to 7° at stations in all parts of the country, and at Chicago, Milwaukee, Leavenworth, Breckenridge, and Rochester it amounts to over 8°. Much colder weather has prevailed than in December, 1871, in all sections east of the territories, except from Virginia to southern New Jersey, and from Nebraska to northern Illinois where the temperatures have been about the same. This unusually severe weather may be attributed to the large number of areas of high barometer, or high atmospheric waves, which, with their attending low temperatures, have rolled across the country from west to east. No less than fifteen of these areas of high pressure nave been traced upon the Weather Maps for this month, while during the corresponding month last year only nine made their appearance.

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